

EXHIBIT 31

1 UNITED STATES DISTRICT COURT

2 FOR THE DISTRICT OF UTAH

3
4 COREL SOFTWARE,)

5 Plaintiff,)

6 vs.) Civil No.

7 MICROSOFT CORP.,) 2:15-cv-0528-JNP

8 Defendant.)

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12
13 Deposition of BENJAMIN B. BEDERSON, Ph.D.

14 August 17, 2016 * 8:01 a.m.

15 101 South 200 East, Suite 700

16 Salt Lake City, Utah 84111

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18 Reporter: Ann Fleming, RPR

19 Notary Public in and for the State of Utah

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23
24 JOB No. 2368678

25 PAGES 1 - 99

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<p>1 something that is not persistent, it comes and goes.</p> <p>2 Q. In paragraph 71, you say, "Therefore, in</p> <p>3 '483 Claim 1, the claimed Real Time Preview appears in</p> <p>4 the same area on the screen displaying the user's</p> <p>5 document." Do you see that?</p> <p>6 A. Yes, I do.</p> <p>7 Q. And would a dialog window drawn in the</p> <p>8 same place on the user screen satisfy Claim 1 of the</p> <p>9 '483 patent?</p> <p>10 MR. HARTING: Object to form.</p> <p>11 THE WITNESS: So to answer your question,</p> <p>12 I'd like to just make sure I understand the scenario</p> <p>13 you're describing because there's a lot of details you</p> <p>14 left out, just to make sure we're talking about the</p> <p>15 same thing. If we have a word processor with the</p> <p>16 primary document display window and you've got the</p> <p>17 document in that window, I think you're describing a</p> <p>18 scenario where you have a popup modal dialog box on top</p> <p>19 of that, so your question is, if you have something in</p> <p>20 that popup modal dialog box that overlays the</p> <p>21 underlying document, to the extent that that popup</p> <p>22 dialog box overlaps some of that document, does that</p> <p>23 meet, this appears in the same place requirement?</p> <p>24 Q. Yes.</p> <p>25 A. So, in that scenario, my answer is, no, it</p> <p style="text-align: right;">Page 78</p>	<p>1 borders around it and the menus and everything else,</p> <p>2 would that be, quote-unquote, in the same area of the</p> <p>3 screen?</p> <p>4 MR. HARTING: Object to form.</p> <p>5 THE WITNESS: Just to be clear, we're</p> <p>6 talking about a hypothetical with some features that</p> <p>7 are not actually supported in Word 97?</p> <p>8 Q. (By Mr. Lamberson) I'm not saying they're</p> <p>9 not supported; I'm just asking you if we modified in</p> <p>10 the way that we described.</p> <p>11 A. Just to clarify, not if a user modified</p> <p>12 the window because I don't think a user can modify that</p> <p>13 window, but maybe if Microsoft made a new version of</p> <p>14 the software that did something different, than it</p> <p>15 currently does?</p> <p>16 Q. If they made it a little bit bigger, yes,</p> <p>17 that's what I'm asking, would it be in the same place</p> <p>18 on the screen if they just resized it to make it the</p> <p>19 size of it correspond -- what I'm trying to figure out</p> <p>20 here is you seem to be drawing a distinction between</p> <p>21 what's the document and what's on top of the document,</p> <p>22 but it seems like being on top of it isn't enough,</p> <p>23 there's something else.</p> <p>24 A. Right.</p> <p>25 Q. So what's that something else?</p> <p style="text-align: right;">Page 80</p>
<p>1 does not because for multiple reasons, two general</p> <p>2 categories of my understanding come from the fact that</p> <p>3 the patent describes displaying the preview in the</p> <p>4 document display window and that popup modal dialog box</p> <p>5 probably isn't a document display window, and the</p> <p>6 second general reason is in the file history as I</p> <p>7 explained on paragraph 68 of my Declaration, the patent</p> <p>8 owners explicitly disclaimed transient small preview</p> <p>9 windows.</p> <p>10 So popup dialog box I think would not meet</p> <p>11 the requirement for being the same -- just generally</p> <p>12 would not meet the requirements of the patent, which</p> <p>13 includes the question you asked about being the same</p> <p>14 place on the screen.</p> <p>15 Q. Let's take the Style Gallery in Word 97</p> <p>16 for a moment, okay?</p> <p>17 A. Okay.</p> <p>18 Q. And that we said had a preview window that</p> <p>19 showed the entire document, right?</p> <p>20 A. Generally, that's right.</p> <p>21 Q. And what if I made that window -- I drew</p> <p>22 that window so that I modified the dialog box in Word</p> <p>23 97 so that the boundaries of the preview document</p> <p>24 exactly lined up with the boundaries of the document</p> <p>25 displayed underneath, but you could still see all the</p> <p style="text-align: right;">Page 79</p>	<p>1 A. So I think that we're really referring --</p> <p>2 this discussion is all about the "updating the display"</p> <p>3 term, and I think Corel's construction most accurately</p> <p>4 describes what is the right understanding of that term,</p> <p>5 and that construction -- well, first of all, they know</p> <p>6 construction is necessary, but if one is necessary,</p> <p>7 then they say would be updating user's work area in</p> <p>8 accordance with the identified command.</p> <p>9 So when I wrote in paragraph 71 that "the</p> <p>10 claimed Real Time Preview appears in the same place on</p> <p>11 the screen displaying the user's document," I was</p> <p>12 intending to communicate this idea of updating the</p> <p>13 user's work area, which as I described elsewhere in my</p> <p>14 Declaration, that this is updating the document display</p> <p>15 window, which is on the same place on the screen.</p> <p>16 So I think the real requirement of</p> <p>17 updating the display of the portion of the document on</p> <p>18 the display of the commuter in accordance with the</p> <p>19 identified command, is that it is updating the document</p> <p>20 display window, not some other transient small popup</p> <p>21 window.</p> <p>22 Q. How about transient large popup window?</p> <p>23 Could that be updating the display in the '483 patent?</p> <p>24 A. So I think my answer to this is, it</p> <p>25 depends on the specific user interface and I'd have to</p> <p style="text-align: right;">Page 81</p>

<p>1 understand whether that was reading on the claim that 2 we're talking about, I would have to analyze the whole 3 user interface.</p> <p>4 Q. Let's go to paragraph 76. You say, "A 5 person of ordinary skill in the art would understand 6 the term 'font command code,' as used in the '483 7 patent, to mean 'code corresponding to setting a font 8 attribute.'" Do you see that?</p> <p>9 A. Yes, I do.</p> <p>10 Q. When you say, "code corresponding to 11 setting a font attribute," are you referring to the 12 code in the program that actually makes the change?</p> <p>13 MR. HARTING: Object to form.</p> <p>14 THE WITNESS: So the reason I think this 15 is the right construction code corresponding to setting 16 a font attribute is precisely because it doesn't 17 specify exactly how you have to implement the setting 18 of the font attribute. I think the patent gives a 19 range of technical approaches to setting font 20 attributes and I think that the patent specifically 21 disclaims any specific technology. So the code, I 22 think, is not restricted to any specific kind of 23 implementation.</p> <p>24 Q. (By Mr. Lamberson) Could be any 25 implementation at all? There's no limit on how you can</p> <p style="text-align: right;">Page 82</p>	<p>1 command code, or is it just the data value that's the 2 font code?</p> <p>3 A. I don't think there's any specific 4 limitation on how to implement the font command code. 5 I think it could include both data structures and code 6 elements, which is consistent with the specification, 7 which sometimes describes things that I think we're 8 referring to as "data structures." It also refers to 9 pushing code onto the undo stack, which I think I read 10 as being executable code, so I think the patent 11 describes a range of uses of the term "code."</p> <p>12 Q. And what do you mean in paragraph 76 by 13 "font attribute"?</p> <p>14 A. I think that's a term that's pretty clear 15 to a person of skill in the art, simply means an 16 attribute of a font. The patent talks about various 17 attributes of fonts such as font face, size and color; 18 those are all font attributes.</p> <p>19 Q. Are there any font attributes you think 20 are covered by Claim 1 of the '483 other than font 21 face, font size, font color?</p> <p>22 A. I haven't formed an opinion about all 23 possible user interfaces or systems that this could 24 apply to, so I don't have an exhaustive list of what 25 the range of font attributes could be.</p> <p style="text-align: right;">Page 84</p>
<p>1 implement font command code in your view?</p> <p>2 MR. HARTING: Object to form.</p> <p>3 THE WITNESS: I think the font command 4 code has to meet the overall requirements of the claim 5 if you want to have a font command code that in a 6 particular system that satisfies the requirements. 7 But, as I said, I don't think -- I think that a range 8 of technical limitations are certainly appropriate.</p> <p>9 Q. (By Mr. Lamberson) I guess what I'm get 10 getting at, in some programs you might have a 11 particular data value that corresponds to a particular 12 font, so value 1 could be Times New Roman, value 2 13 could be Arial, et cetera, et cetera. Do you 14 understand what I'm referring to?</p> <p>15 A. In general, yes.</p> <p>16 Q. And so that data value, could that be a 17 font command code in your opinion, the 1 or the 2?</p> <p>18 A. I think it depends how it is used, but 19 conceptually I think a font command code could be a 20 data element that's part of a data structure.</p> <p>21 Q. And then somewhere else in the program 22 there's going to be some code that when the user 23 changes from Times New Roman to Arial, there's going to 24 be code that says change value from 1 to 2, some source 25 code. Could that source code itself also be a font</p> <p style="text-align: right;">Page 83</p>	<p>1 Q. Could you give me any examples of font 2 attributes other than font face, font size and font 3 color today?</p> <p>4 A. None jump to mind.</p> <p>5 Q. Are you familiar with how Corel 6 WordPerfect stored font formatting information in a 7 document?</p> <p>8 MR. HARTING: Object to form.</p> <p>9 THE WITNESS: I have not done a deep 10 technical analysis of WordPerfect, but I think I have a 11 high level understanding.</p> <p>12 Q. (By Mr. Lamberson) What's your high level 13 understanding?</p> <p>14 A. That there are data structures that are 15 placed within the text of the document that are used to 16 control how the text of the document is rendered much 17 like HTML does today.</p> <p>18 Q. Is there any particular term you'd use to 19 refer to that font formatting information in the text 20 of a document in WordPerfect?</p> <p>21 A. Again, I haven't done a technical 22 analysis. I don't know if Corel engineers used any 23 particular term to describe that approach.</p> <p>24 Q. Have you ever heard of the Reveal Codes 25 functionality in WordPerfect?</p> <p style="text-align: right;">Page 85</p>

<p>1 A. Yes, I have.</p> <p>2 Q. Have you ever used that functionality?</p> <p>3 A. Yes, I have.</p> <p>4 Q. Had you heard about it before this</p> <p>5 litigation, Reveal Codes?</p> <p>6 A. Yes, I have.</p> <p>7 Q. Had you used it before this litigation,</p> <p>8 you think?</p> <p>9 A. I don't recall if I have or have not.</p> <p>10 Q. You ever read that Reveal Codes is one</p> <p>11 feature commonly associated with WordPerfect?</p> <p>12 MR. HARTING: Object to foundation.</p> <p>13 THE WITNESS: I have no way of knowing</p> <p>14 whether it was common or not.</p> <p>15 Q. (By Mr. Lamberson) How did you hear about</p> <p>16 it, Reveal Codes?</p> <p>17 A. I specifically recall last year having</p> <p>18 someone in my neighborhood tell me that he used the</p> <p>19 Reveal Codes feature of WordPerfect, so that's at least</p> <p>20 one way I've heard about it.</p> <p>21 Q. Have you ever heard of the WordStar word</p> <p>22 processor?</p> <p>23 A. I've heard the term.</p> <p>24 Q. Ever used it?</p> <p>25 A. I don't recall using it.</p> <p style="text-align: right;">Page 86</p>	<p>1 Q. Well, is this the only place you're aware</p> <p>2 of that this language "additional sets" appears in the</p> <p>3 intrinsic record?</p> <p>4 A. There's a long intrinsic record. I don't</p> <p>5 know for sure whether or not it appears elsewhere.</p> <p>6 Q. Would you agree that you don't cite</p> <p>7 anywhere else that uses this single step language --</p> <p>8 or, sorry, additional step language?</p> <p>9 A. As I said, there's a lot of documentation.</p> <p>10 I don't recall any other specific place in the record</p> <p>11 that uses that term, and I don't recall if I cited it</p> <p>12 elsewhere or not.</p> <p>13 Q. And you've added the italics that are in</p> <p>14 this paragraph in 91, right?</p> <p>15 A. That's right, as I described in the</p> <p>16 Declaration.</p> <p>17 Q. The next sentence then says, "The user can</p> <p>18 then confirm the selection and a code corresponding to</p> <p>19 the identified font code is inserted into the</p> <p>20 document." Do you see that?</p> <p>21 A. Yes, I do.</p> <p>22 Q. So that suggests that the font code in the</p> <p>23 '483 patent is something that's inserted in the</p> <p>24 document, right?</p> <p>25 A. Certainly suggests that's at least one way</p> <p style="text-align: right;">Page 88</p>
<p>1 Q. Pretty famous word processor, right?</p> <p>2 A. I don't have any way of judging whether it</p> <p>3 was famous or not.</p> <p>4 Q. Do you know how WordStar stored font</p> <p>5 formatting information?</p> <p>6 A. No, I do not.</p> <p>7 MR. LAMBERSON: Let's take a short break.</p> <p>8 (Break)</p> <p>9 Q. (By Mr. Lamberson) Let's look at paragraph</p> <p>10 91 of your Declaration. You refer to a portion of the</p> <p>11 file history for the '483 patent. Do you see that?</p> <p>12 A. Yes, I do.</p> <p>13 Q. Specifically a sentence that says, "By</p> <p>14 allowing this type of preview the user can quickly see</p> <p>15 the impact on the document without performing</p> <p>16 additional sets," which you interpret to mean steps; is</p> <p>17 that fair?</p> <p>18 A. That's part of the quote that I</p> <p>19 referenced.</p> <p>20 Q. And you think it's important that the</p> <p>21 Court consider this part of the file history, this</p> <p>22 paragraph in construing this patent?</p> <p>23 A. I think all of the patents in its file</p> <p>24 history should be considered but certainly including</p> <p>25 this quote that I include.</p> <p style="text-align: right;">Page 87</p>	<p>1 to implement this.</p> <p>2 Q. Well, so you're saying that even though</p> <p>3 Corel said this year there could be other ways to</p> <p>4 insert font command codes not into the document?</p> <p>5 MR. HARTING: Object to form.</p> <p>6 THE WITNESS: I think the actual</p> <p>7 requirement of the claim is, quote, "inserting the font</p> <p>8 command code corresponding to the identified font into</p> <p>9 the memory medium storing the active document," which</p> <p>10 is different than I think the way you just described it</p> <p>11 as inserting the font command code into the document.</p> <p>12 Q. Right. But even though Corel said, here</p> <p>13 in this portion of the file history, the code is</p> <p>14 inserted into the document, you interpret the claims to</p> <p>15 also cover other ways of inserting font command codes,</p> <p>16 true?</p> <p>17 A. As I said, I don't think the claims should</p> <p>18 limit font command codes to one specific technical</p> <p>19 implementation.</p> <p>20 Q. You do think, though, that the claims</p> <p>21 should be limited to only previewing with a single</p> <p>22 step, right?</p> <p>23 A. Just to be clear, the construction that we</p> <p>24 referred to of using a single step was referring to the</p> <p>25 identifying but not executing term of the '996 patent,</p> <p style="text-align: right;">Page 89</p>

<p>1 and now we're talking about the '483 patent where the</p> <p>2 relevant term is without confirmation being received</p> <p>3 from the user.</p> <p>4 Q. And there your proposal is, without</p> <p>5 receiving an indication, that the user has performed</p> <p>6 the subsequent step required to confirm the identified</p> <p>7 font; is that right?</p> <p>8 A. That's correct.</p> <p>9 Q. Could a user perform multiple steps to</p> <p>10 preview in the '483 patent so long as the last step is</p> <p>11 -- so long as none of them were a confirmation step, in</p> <p>12 your opinion?</p> <p>13 A. So looking at the '483 patent Claim 1,</p> <p>14 there are a number of limitations, all of which would</p> <p>15 have to be satisfied for this claim to apply, but I</p> <p>16 think the thing that we're talking about, the core user</p> <p>17 activity is to include identifying a font by hovering</p> <p>18 of the cursor for a predetermined period of time over</p> <p>19 the font. There are a number of other characteristics</p> <p>20 followed by updating the display of the active document</p> <p>21 in the document display window to show the impact of</p> <p>22 the inserted font command code on the display of text</p> <p>23 of the active document without confirmation being</p> <p>24 received from the user.</p> <p>25 So I think the two relevant pieces that we</p> <p style="text-align: right;">Page 90</p>	<p>1 say, "Instruction is a well-known phrase in the art</p> <p>2 connoting structure," right?</p> <p>3 A. Yes.</p> <p>4 Q. Would you agree that all software programs</p> <p>5 ever written are made up of some number of</p> <p>6 instructions?</p> <p>7 A. I hesitate to say that, to make such a</p> <p>8 broad statement, maybe there are some systems that I'm</p> <p>9 not aware of or haven't thought of that somehow</p> <p>10 communicate to a computer to execute activity with</p> <p>11 something that I wouldn't consider instruction. I</p> <p>12 can't think of any, but I not going to say that there</p> <p>13 never could be such a thing.</p> <p>14 Q. Let me phrase it this way. Is there any</p> <p>15 software that you're aware of sitting here today that</p> <p>16 was made up of some number of instructions?</p> <p>17 A. No. In fact, as I said here in paragraph</p> <p>18 150-A, quote, "I understand 'instructions' to be one of</p> <p>19 the core building blocks of a commuter software</p> <p>20 program."</p> <p>21 Q. Can you tell me roughly how many times</p> <p>22 you've served as an expert in patent cases?</p> <p>23 A. Approximately two dozen.</p> <p>24 Q. Do you have any sense of what percentage</p> <p>25 of those roughly were on behalf of plaintiffs in patent</p> <p style="text-align: right;">Page 92</p>
<p>1 just talked about is identifying a font by hovering and</p> <p>2 without confirmation being received from the user.</p> <p>3 Q. Right.</p> <p>4 A. In general, my understanding is that in</p> <p>5 practice, a claim of a patent, by doing additional</p> <p>6 elements, as long as you at least do these elements, so</p> <p>7 I think what the key thing that you're asking is, could</p> <p>8 there be some other steps if the user steps, after</p> <p>9 identifying a font by hovering, but without</p> <p>10 confirmation being received from the user.</p> <p>11 So as I just said in general, additional</p> <p>12 steps are typically allowed as long as all of the</p> <p>13 requirements of the claim are met. So at least</p> <p>14 conceptually, it might be possible for there to be some</p> <p>15 additional user action if it didn't include</p> <p>16 confirmation, but, again, it would have to depend on</p> <p>17 any specific, any actual analysis would have to depend</p> <p>18 on the specific interface.</p> <p>19 Q. Do you agree that in the '483 patent you</p> <p>20 can't identify a font by hovering of the cursor without</p> <p>21 first knowing where the cursor is?</p> <p>22 A. I think if you're going to identify a font</p> <p>23 by hovering of the cursor, at least part of the system</p> <p>24 needs to know where the cursor is.</p> <p>25 Q. Paragraph 150 of your Declaration, you</p> <p style="text-align: right;">Page 91</p>	<p>1 cases, or patentholders I should say?</p> <p>2 A. I'm not sure exactly but somewhere in the</p> <p>3 order of a quarter.</p> <p>4 Q. And the rest then were for accused</p> <p>5 infringers?</p> <p>6 A. Correct, a very rough approximation.</p> <p>7 Q. Sure. How many times have you worked as</p> <p>8 an expert for the Robins Kaplan firm before this case?</p> <p>9 A. I think I worked with them for one other</p> <p>10 case.</p> <p>11 Q. What case was that? What was the name?</p> <p>12 A. I'm not sure if I was ever disclosed as an</p> <p>13 expert in that case, so I don't think I can say.</p> <p>14 Q. How many hours did you spend preparing the</p> <p>15 Declaration that you submitted in this case?</p> <p>16 A. I did not look at a summary, so I don't</p> <p>17 recall.</p> <p>18 Q. Do you know how many hours you billed</p> <p>19 total for this matter?</p> <p>20 A. No, I do not.</p> <p>21 Q. Do you have any order of magnitude or</p> <p>22 estimate of how much money you've received from Corel</p> <p>23 to date for your expert services?</p> <p>24 A. So order of magnitude, so within a factor</p> <p>25 of ten?</p> <p style="text-align: right;">Page 93</p>